

Applicants: Chong-Jin Oon et al.  
Serial No.: 09/362,394  
Filed: July 28, 1999  
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REMARKS

Claims 69-85 and 87-105 are pending in the subject application. By this Amendment, applicants have amended claims 69, 70, 75, 76, 82, 84, 85, and 96. Applicants maintain that the amendments to the claims raise no issue of new matter. Support for the amendment to claim 69 can be found in the specification as originally filed at, *inter alia*, page 9, lines 17-25. Support for the amendment to claim 70 can be found in the specification as originally filed at, *inter alia*, page 9, lines 22-35. Support for the amendment to claim 75 can be found in the specification as originally filed at, *inter alia*, page 9, lines 22-35; and page 14, line 26-29. Support for claim 76 can be found in the specification as originally filed at, *inter alia*, page 9, lines 25-29. Support for the amendment to claim 82 can be found in the specification as originally filed at, *inter alia*, page 10, lines 18-24. Support for the amendment to claim 84 can be found in the specification as originally filed at, *inter alia*, page 10, lines 10-24. Support for the amendment to claim 85 can be found in the specification as originally filed at, *inter alia*, page 14, line 31 to page 18, line 21; page 9, lines 14-35; page 14, lines 26-29; and page 11, line 15. Support for the amendment to claim 96 can be found in the specification as originally filed at, *inter alia*, page 9, line 14; and page 10, line 4, and page 8, lines 13-21. Accordingly, applicants respectfully request entry of this Preliminary Amendment. After entry of this Preliminary Amendment, claims 69-85 and 87-105 will still be pending and under examination in the subject application.

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**Rejection Under 35 U.S.C. §103(a)**

The Examiner rejected claims 69-85 and 87-105 under 35 U.S.C. §103(a) as allegedly unpatentable over Stuyver et al (WO 97/40193) in view of Guo et al. (Nucleic Acids Research 22(24):5456-5465, 1994), and McCasky Feazel et al. (U.S. Patent No. 6,100,030).

In response, applicants respectfully traverse the Examiner's rejection. Applicants maintain that the cited references fail to support a *prima facie* case of obviousness for amended claims 69-85 and 87-105.

Amended claims 69-85 and 87-105 provide oligonucleotides linked to fluorescent dyes and primary amine groups, compositions comprising same and methods for identifying the human hepatitis B virus surface antigen mutant 145 and the wildtype human hepatitis B surface antigen using the claimed oligonucleotides. These claims are based, at least in part, on applicants' novel oligonucleotides that may be used to amplify the human hepatitis B virus surface antigen mutant 145, thereby enabling its detection in serum samples.

The cited references, in combination, fail to teach each and every element of the instant claims as amended. In particular, the references fail to teach the oligonucleotide sequences (SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:7) as set forth in amended claims 69, 70,

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75, 76, 81, 82, 84, 85, 87, 88, 93, 96, 97, 98 and 103. Applicants specifically note, as the Examiner has previously acknowledged, that Stuyver's disclosed probe sequences (SEQ ID NOs: 77-82) are not the same as the sequences in applicants' claimed invention. The Examiner states that some sequences taught in Stuyver are similar to applicants' claimed sequences, but does not state why applicants' sequences would be obvious. For example, there is no teaching in Stuyver et al., nor the remaining references, why the sequence TACGGACGGAAACT (SEQ ID NO:3), as recited in applicants' claim 69, is obvious. Applicants respectfully suggest that the Examiner particularly point out with page and line references where, in the references cited, SEQ ID NO:3 is made obvious, so that applicants may address the obviousness rejection.

In view of the above remarks, applicants maintain that the Examiner has failed to set forth a *prima facie* case of obviousness, and that accordingly, claims 69-85 and 87-105 satisfy the requirements of 35 U.S.C. §103(a).

#### Summary

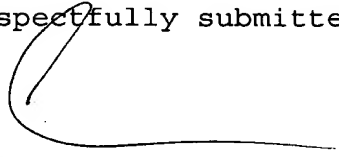
Applicants respectfully request that the Examiner reconsider and withdraw the rejections, and earnestly solicit allowance of the pending claims.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorneys invite the Examiner to telephone them at the number provided below.

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No fee is deemed necessary in connection with the filing of this Preliminary Amendment. However, if any fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,



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